

RESPONSE

Claims 1-30 were pending in the Application. Upon entry of the present paper, claim 31 is newly-added to more particularly claim certain aspects of the invention. Accordingly, claims 1-31 are pending and are presented for favorable consideration. No new matter has been added.

Rejections Under 35 U.S.C. §102(e)

Claims 1-30 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 6,549,210 to Van Hook et al (hereinafter "the '210 patent"). The Office Action asserts, in part, that the "trie" or "trie traversal" aspect of the invention recited in each of the independent claims (1, 12, 17, 27, 28, and 31) is taught by the tiles and the DRAM of the '210 patent (see FIG. 9).

Applicant respectfully disagrees that FIG. 9 or any other part of the '210 patent teaches or suggests a trie or a traversal of a trie based on a first address to determine a second address. More particularly, FIG. 9 and related discussion in the '210 patent illustrates that data stored in particular DRAM memory locations can be mapped to particular memory locations in a cache memory and that a cache table stores tags (i.e., indexes) that enable particular cache memory locations to be located based on a desired DRAM memory location. The tiles and DRAM memory locations of the '210 patent refer to graphical data and memory addresses, respectively, and do not refer to a trie data structure that is traversed based on a first address to determine a second address, as asserted in the Office Action. Although, the '210 patent teaches that a tag table is traversed to locate a cache address based on a DRAM address, a tag table as described in the '210 patent is not the same as or equivalent to a trie data structure. Further and in contrast to the presently-claimed invention, which uses traversal of a trie data structure to improve the efficiency of cache indexing, the '210 patent hashes a cache index to avoid cache aliasing (see column 18 of the '210 patent) and uses this hashed index to improve upon the efficiency of the cache (rather than improve upon the efficiency of cache indexing itself), such as by reducing the number of cache misses when multiple memory locations map into a common cache location. The improved cache indexing efficiency of

the present invention further illustrates that the use of a trie data structure and its traversal to identify related cache addresses provide significant performance advantages and represent more than a mere engineering design choice. Accordingly, the Applicant respectfully submits that the '210 patent fails to teach every aspect of the claimed invention either explicitly, impliedly, or inherently as required by MPEP §706.02 and thus an anticipation rejection under 35 U.S.C. §102(e) is inappropriate. For at least the foregoing reason, Applicant believes that all of the independent claims, as well as the claims depending therefrom, are patentable over the '210 patent and, therefore, respectfully requests that the rejections under 35 U.S.C. §102(e) be withdrawn and that all pending claims be allowed.

Silence with regard to any of the Examiner's rejections is not an acquiescence to such rejections. Specifically, silence with regard to the Examiner's rejection of a dependent claim, when such claim depends from an independent claim that Applicant considers allowable for reasons provided herein, is not an acquiescence to such rejection of the dependent claims, but rather a recognition by Applicant that such previously-lodged rejection is moot based on Applicant's remarks relative to the independent claim (that Applicant considers allowable) from which the dependent claims depend.

Applicant requests that the Examiner reconsider the claims in light of the foregoing Response, and respectfully submits that the Application is in condition for allowance. If, in the Examiner's opinion, a telephonic interview would expedite the favorable prosecution of the present Application, the undersigned attorney would welcome the opportunity to discuss any outstanding issues, and to work with the Examiner toward placing the Application in condition for allowance.

Respectfully submitted,



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